

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented) A method for generating an aerosol, comprising the steps of:

preparing a solution comprising a first component in a liquid component such that after volatilization of the liquid component, an aerosol is formed wherein the aerosol comprises at least first component aerosol particles and liquid component aerosol particles, and the first component aerosol particles have a predetermined particle size distribution, wherein the solution is prepared such that the amount of the first component therein is sufficient to achieve the predetermined particle size distribution; and

passing the solution through a flow passage while heating the solution to a temperature sufficient to volatilize the liquid component, wherein the flow passage comprises an outlet through which the first component and the volatilized liquid component flow, and wherein the aerosol particles are formed.

2. (Original) The method according to claim 1, wherein the solution is prepared such that the amount of the first component therein is sufficient to achieve a predetermined ratio of the mass median aerosol diameter of the first component aerosol particles to the mass median aerosol diameter of the liquid component aerosol particles.

3. (Original) The method according to claim 2, wherein the first component is present in an amount effective to cause the ratio of the mass median aerosol diameter of the first component aerosol particles to the mass median aerosol diameter of the liquid component aerosol particles to be greater than or equal to about 0.75 after formation of the aerosol.

4. (Original) The method according to claim 3, wherein the first component is present in an amount effective to cause the mass median aerosol diameter of the first component aerosol particles and the mass median aerosol diameter of the liquid component aerosol particles to be approximately equal after formation of the aerosol.

5. (Original) The method according to claim 2, wherein the first component is present in an amount effective to cause the ratio of the mass median aerosol diameter of the first component aerosol particles to the mass median aerosol diameter of the liquid component aerosol particles to be less than or equal to about 0.75 after formation of the aerosol.

6. (Currently Amended) The method according to claim 1, wherein the flow passage is of capillary dimensions which permit volatilization of substantially all of the liquid component when the solution is passed through the flow passage [is heated] while heating.

7. (Previously presented) The method according to claim 1, wherein the solution comprises the first component in the form of solid particles dissolved in the liquid component.

8. (Original) The method according to claim 1, wherein at least some of the first component is volatilized during the heating of the solution.

9. (Original) The method according to claim 8, wherein the volatilized liquid component and the volatilized first component condense after mixing with ambient air to form the aerosol.

10. (Original) The method according to claim 1, wherein the first component comprises a medicament suitable for treating a respiratory ailment.

11. (Original) The method according to claim 1, wherein the first component is budesonide.

12. (Previously presented) The method according to claim 1, wherein the solution comprises the first component in a concentration of less than about 0.5% by weight.

13. (Previously presented) The method according to claim 12, wherein the solution comprises the first component in a concentration of less than about 0.1% by weight.

14. (Previously presented) The method according to claim 1, wherein the liquid component is selected from the group consisting of water, propylene glycol, ethylene glycol, dipropylene glycol, diethylene glycol, triethylene glycol, tetraethylene glycol, oleyl alcohol, ethanol, and mixtures thereof.

15. (Original) The method according to claim 1, wherein the aerosol is deposited into a lung of an animal or human.

16. (Canceled)

17. (Canceled)

18. (Previously presented) The method according to claim 1, wherein the first component flows out of the outlet of the flow passage contemporaneously with the volatilized liquid component.

19. (Currently amended) The method according to claim 1, wherein the mass median aerosol diameter of the first component aerosol particles is from about 0.3 to 2 μm .

20. (Previously presented) The method according to claim 1, wherein the solution is prepared such that the amount of the first component therein is sufficient to achieve a substantially monodispersed particle size distribution of the first component aerosol particles.

21. (Original) The method according to claim 20, wherein the geometric standard deviation of the particle size distribution of the first component is less than or equal to about 2.

22. (Previously presented) A method for generating an aerosol, comprising the steps of:

preparing a solution comprising a first component in a liquid component such that after volatilization of the liquid component, an aerosol is formed wherein the aerosol comprises at least first component aerosol particles and liquid component aerosol particles, and the first component aerosol particles have a substantially monodispersed particle size distribution, wherein the solution is prepared such that the boiling point of the liquid component is sufficient to achieve the substantially monodispersed particle size distribution; and

passing the solution through a flow passage while heating the solution to a temperature sufficient to volatilize the liquid component, wherein the flow passage comprises an outlet through which the first component and the volatilized liquid component flow, and wherein the aerosol particles are formed.

23. (Currently Amended) The method according to claim 22, wherein the flow passage is of capillary dimensions which permit volatilization of substantially all of the liquid component when the solution is passed through the flow passage [is heated] while heating.

24. (Previously presented) The method according to claim 22, wherein the solution comprises the first component in the form of solid particles dissolved in the liquid component.

25. (Original) The method according to claim 22, wherein at least some of the first component is volatilized during the heating of the solution.

26. (Original) The method according to claim 25, wherein the volatilized liquid component and the volatilized first component condense after mixing with ambient air to form the aerosol.

27. (Original) The method according to claim 22, wherein the first component comprises a medicament suitable for treating a respiratory ailment.

28. (Original) The method according to claim 22, wherein the first component is budesonide.

29. (Previously presented) The method according to claim 22, wherein the solution comprises the first component in a concentration of less than about 0.5% by weight.

30. (Previously presented) The method according to claim 29, wherein the solution comprises the first component in a concentration of less than about 0.1% by weight.

31. (Previously presented) The method according to claim 22, wherein the liquid component is selected from the group consisting of water, propylene glycol, ethylene glycol, dipropylene glycol, diethylene glycol, triethylene glycol, tetraethylene glycol, oleyl alcohol, ethanol, and mixtures thereof.

32. (Original) The method according to claim 22, wherein the aerosol is deposited into a lung of an animal or human.

33. (Canceled)

34. (Canceled)

35. (Currently amended) The method according to claim 22, wherein the first component flows out of [[an]] the outlet of the flow passage contemporaneously with the volatilized liquid component.

36. (Currently amended) The method according to claim 22, wherein the mass median aerosol diameter of the first component aerosol particles is from about 0.3 to 2 μm .

37. (Original) The method according to claim 22, wherein the geometric standard deviation of the particle size distribution of the first component is less than or equal to about 2.

38. (Previously presented) A method for generating an aerosol, comprising the steps of:

preparing a solution comprising a first component in a liquid component such that after volatilization of the liquid component, an aerosol is formed wherein the aerosol comprises at least first component aerosol particles and liquid component aerosol particles, and the first component aerosol particles have a predetermined and substantially monodispersed particle size distribution, wherein the solution is prepared such that the amount of the first component therein and the boiling point of the liquid component are sufficient to achieve the predetermined and substantially monodispersed particle size distribution; and

passing the solution through a flow passage while heating the solution to a temperature sufficient to volatilize the liquid component, wherein the flow passage comprises an outlet through which the first component and the volatilized liquid component flow, and wherein the aerosol particles are formed.

39. (Previously presented) A method for controlling particle size distribution of an aerosol, comprising:

preparing a solution comprising a first component in a liquid component such that the solution achieves a predetermined particle size distribution of first component aerosol particles upon volatilization of the solution by passing the solution through a flow passage while heating the solution.

40. (Previously presented) The method according to claim 39, wherein the concentration of the first component is selected to achieve the predetermined particle size distribution of the first component aerosol particles.

41. (Previously presented) The method according to claim 39, wherein the boiling point of the liquid component is selected to achieve the predetermined particle size distribution of the first component aerosol particles.

42. (Original) The method according to claim 39, wherein the first component is a medicament.

43. (Previously presented) A method for providing a monodispersed particle size distribution of an aerosol, comprising:

preparing a solution comprising a first component in a liquid component, such that the solution achieves a monodispersed particle size distribution of first component aerosol particles, upon volatilization of the solution by passing the solution through a flow passage while heating the solution.

44. (Previously presented) The method according to claim 43, wherein the concentration of the first component is selected to achieve the monodispersed particle size distribution of the first component aerosol particles.

45. (Previously presented) The method according to claim 43, wherein the boiling point of the liquid component is selected to achieve the monodispersed particle size distribution of the first component aerosol particles.

46. (Original) The method according to claim 43, wherein the first component is a medicament.

47. (Previously presented) The method according to claim 1, wherein the first component is selected from the group consisting of budesonide, albuterol, deoxycorticosterone, benzil, phenyl salicylate, and mixtures thereof.

48. (Previously presented) A method for generating an aerosol, comprising the steps of:

(a) preparing a liquid mixture comprising a first component and a liquid component such that after volatilization of the liquid component, an aerosol is formed, wherein the aerosol comprises at least first component aerosol particles and liquid component aerosol particles and the first component aerosol particles have a predetermined and substantially monodispersed particle size,

wherein the liquid mixture is prepared to achieve the predetermined and substantially monodispersed particle size by adjusting the concentration of the first component in the liquid component, by adjusting the boiling point of the liquid component, or combinations thereof; and

(b) passing the liquid mixture through a flow passage while heating the liquid mixture to a temperature sufficient to volatilize the liquid component, wherein the flow passage comprises an outlet through which the first component and the volatilized liquid component flow, and wherein the aerosol particles are formed.

49. (Previously presented) The method according to claim 48, wherein the liquid mixture is a suspension or a solution.